

WHAT IS CLAIMED IS:

1. A patch panel mountable to a network rack, comprising:
a frame forming a central section and having a longitudinal width sized to
fit within the network rack, a predefined height, a front side, and a rear side; and
5 rack mounting plates provided on opposite longitudinal ends of the central
section,

wherein the central section is angled outwardly in an inverted V-shape, the
central section having mountable thereon a plurality of cable connectors that receive
cabling on the front side and the rear side of the patch panel frame, the plurality of cable
10 connectors when mounted being oriented to have rear surfaces thereof face a common
axis of the central section.

2. The patch panel according to claim 1, wherein the common axis of the
central section is located at a midpoint of the central section.

3. The patch panel according to claim 1, wherein the frame includes at least
15 one faceplate opening.

4. The patch panel according to claim 3, wherein at least two faceplate
openings are provided, one on each side of the common axis of the central section.

5. The patch panel according to claim 3, further comprising at least one
removable insert module sized to fit within said at least one faceplate opening, the at
20 least one removable insert module containing at least one of the plurality of cable
connectors.

6. The patch panel according to claim 5, wherein the at least one removable
insert module is snap fittable to the at least one faceplate opening.

7. The patch panel according to claim 6, wherein the plurality of cable
25 connectors connect to at least one of UTP, ScTP, coaxial and fiber optic cables.

8. The patch panel according to claim 5, wherein six faceplate openings are
provided, three on each side of the common axis of the central section.

9. The patch panel according to claim 8, wherein each faceplate opening
includes at least one removable insert module and each insert module receives twelve
30 cable connectors.

10. The patch panel according to claim 5, wherein twelve faceplate openings are provided, six on each side of the common axis of the central section.

11. The patch panel according to claim 10, wherein each faceplate opening includes at least one removable insert module and each insert module receives four cable connectors.

12. The patch panel according to claim 1, wherein the central section of the frame has two angled panel sections, each angled relative to the other by an obtuse angle ϕ of between 90° and 180° .

13. The patch panel according to claim 12, wherein the angle ϕ is between 100° to 140° .

14. The patch panel according to claim 12, wherein the angle ϕ is between 110° to 130° .

15. The patch panel according to claim 12, wherein the angle ϕ is about 120° .

16. The patch panel according to claim 12, wherein the two panel sections are the same length.

17. The patch panel according to claim 12, wherein the central section includes a flat centerpiece at the intersection of the two angled panel sections.

18. A patch panel assembly for a network rack comprising the patch panel of claim 1 and a cable support bar mountable to the rear of the patch panel.

19. The patch panel assembly of claim 18, wherein the cable support bar includes a bar portion having a longitudinal width sized to fit within the network rack, and rack mounting plates at longitudinal ends of the bar portion.

20. A network rack and patch panel assembly, comprising:
 a network rack having two rails spaced a predetermined distance from each other, each rail including spaced mounting openings; and
 a patch panel mounted to the network rack, the patch panel including
 a frame forming a central section and having a longitudinal width sized to fit between the two rails, a predefined height, a front side, and a rear side; and
 rack mounting plates provided on opposite longitudinal ends of the central section connected to ones of the spaced mounting openings of the rails,

wherein the central section is angled outwardly in an inverted V-shape, the central section having mounted thereon a plurality of cable connectors that receive cabling on the front side and the rear side of the patch panel frame, the plurality of cable connectors being oriented to have rear surfaces thereof face a common axis of the central section.

21. The patch panel according to claim 20, wherein the common axis of the central section is located at a midpoint of the central section.

22. The network rack and patch panel assembly of claim 20, wherein the central section includes at least two faceplate openings, one on each side of the common axis of the central section.

23. The network rack and patch panel assembly of claim 22, further comprising at least two removable insert modules sized to fit within one of the at least two faceplate openings, each of the removable insert modules containing at least one of the plurality of cable connectors.

24. The network rack and patch panel assembly of claim 22, wherein the central section of the frame has two angled panel sections, each angled relative to the other by an obtuse angle ϕ of between about 100° to 140° .

25. The network rack and patch panel assembly of claim 24, wherein the central section of the frame has two angled panel sections, each angled relative to the other by an obtuse angle ϕ of between 90° and 180° .

26. The network rack and patch panel assembly according to claim 25, wherein the angle ϕ is about 120° .

27. The network rack and patch panel assembly of claim 20, further comprising a cable support bar mounted between the rack rails.

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